

REMARKS

SPECIFICATION:

Applicants have updated the reference to coassigned U. S. Patent Application "TUC920000060" to provide the U.S. Patent No.

CLAIMS:

Claims 1-41 and 44-46 comprise the case, Claims 42 and 43 canceled hereby.

Amendments:

Claim 1 has been amended to incorporate the shock mount of original Claim 5, and dependent Claim 5 has been amended to delete the shock mount.

Claim 3 has been amended to depend from allowable Claim 2 rather than from Claim 1.

Claim 4 has been amended to correct a typographical error.

Allowable Claims:

Claims 2, 7-12 and 44-46 are indicated as allowable if rewritten in independent form. Accordingly, Claims 2, 7, 8, 44 and 45 have been rewritten in independent form, and the other allowable claims depend therefrom.

Allowed Claims:

Claims 13-41 are allowed.

DETAILED ACTION:

SPECIFICATION:

The specification was objected to because of the informality in which the reference to coassigned U. S. Patent Application "TUC920000060" needed to be updated.

Accordingly, Applicants have updated the reference to coassigned U. S. Patent Application "TUC920000060" to provide the U.S. Patent No. Applicants respectfully submit that no new matter has been added.

CLAIMS:

Claim objection - 37 CFR 1.75:

Claim 4 was objected to under 37 CFR 1.75 as setting forth "'said transfer station' which was not previously discussed in the claim(s) 4/1."

Accordingly, Applicants have amended Claim 4 to correct the typographical error and recite "a transfer station" as an antecedent basis for "said transfer station". Applicants respectfully submit that no new matter has been added.

35 USC 102:

Claims 1, 3, 4 and 5 stand rejected under 35 U.S.C. 102(b) as being anticipated by Leonhardt et al. (U.S. Patent No. 5,253,246). Claim 42 was also rejected, but has been canceled.

Claim 1:

Claim 1 has been amended to incorporate the shock mount of Claim 5, which has been deleted from Claim 5. Therefore, the rejection will be discussed in that light.

The Examiner stated that Leonhardt et al. (U.S. Pat. No. 5,253,246) teaches a "data storage cartridge of generally an exterior dimensional form factor of a cartridge having a leader block *** that comprises a data storage device *** and a cartridge shell *** [with] a blocking portion where normally would be a leader block hole which is used to differentiate this cartridge from the standard cartridge ***." And with respect to the shock mount, the Examiner states "the claimed shock supporting structure is deemed satisfied by the flexible fingers or bands ***".

As pointed out by the accompanying Declaration under Rule 1.132, "No shock absorbing capability is provided or suggested" by Leonhardt et al. "Rather, the 'media types or miniaturized drive elements' are always retained and supported in a secure and fixed manner."

Specifically, the flexible fingers, bands or retention pads 118 are instead characterized as "pressure fit retention elements *** to secure" the media types or miniaturized drive elements. (emphasis added). (column 4, lines 24-28).

Hence, Applicants respectfully submit that current Claim 1 patentably defines over Leonhardt et al., reciting "A data storage cartridge comprising: a data storage device; a cartridge shell *** comprising a blocking portion ***; and a shock mount supporting and mounting said data storage device within said cartridge shell. (emphasis added).

Applicants therefore respectfully request allowance of Claim 1 over Leonhardt under 35 U.S.C. 102(b), and respectfully request allowance of Claims 4 and 5 which depend from Claim 1.

Claim 3:

Claim 3 was rejected under 35 U.S.C. 102(b), the Examiner stating that the "blocking portion as taught by Leonhardt et al. is at a side of the cartridge normally used for threading a pin that would engage the cartridge".

Applicants respectfully submit that, since Claim 3 now depends from allowable Claim 2, that the "cartridge shell blocking portion" of Claim 2 "is arranged to block said optical source from said sensor when said data storage cartridge is at the end of travel in said receiver, thereby indicating the presence of said data storage cartridge at said end of travel in said receiver, and providing said differentiated identification of said data storage cartridge", and that the Claim 3 recitation "wherein said blocking portion is additionally located at a side of said location of said leader block hole at which said threading pin begins engagement of said tape cartridges, thereby preventing said engagement of said data storage cartridge and providing said differentiated identification of said data storage cartridge" defines two functions of the "blocking portion", such that Claim 3 therefore patentably defines over Leonhardt et al.

Applicants therefore respectfully request allowance of Claim 3 over Leonhardt et al. under 35 U.S.C. 102(b).

Claim 4:

Claim 4 was rejected under 35 U.S.C. 102(b) as anticipated by Leonhardt et al., the Examiner stating "the claimed data

transfer interface is satisfied by the discussion in column 5, lines 47-68."

Applicants respectfully submit that Claim 4, which recites "external data transfer interface coupled to said data storage device for providing data transfer with respect to said transfer station" depends from Claim 1, and that, with the recitation of Claim 1 of "a data storage device; a cartridge shell *** comprising a blocking portion ***; and a shock mount supporting and mounting said data storage device within said cartridge shell", Claim 4 recites a combination not shown or suggested by Leonhardt et al.

Applicants therefore respectfully submit that Claim 4 is patentable over Leonhardt et al. and respectfully request allowance thereof under 35 U.S.C. 102(b).

Claim 5:

The shock mount was moved from Claim 5 to Claim 1, from which Claim 5 depends, and was discussed with respect to Claim 1, and will not be repeated here.

With respect to the flex cable, the Examiner stated "the use of a flex cable interface is deemed satisfied by the moveable interface as discussed" by Leonhardt at column 5, lines 65-68.

Applicants respectfully submit that the flex cable provides an interconnection "while also isolating mechanical contact between the data storage device and the cartridge shell" (present 09/842,030 Application, page 16, line 10 - page 17, line 5), insuring the isolation also provided by the shock mount of Claim 1.

Leonhardt et al., as discussed above, provides no shock mount, and therefore no isolation. Rather, the discussion at

column 5, lines 65-68, of Leonhardt relates to a "connector 801 which is affixed to the interior of the housing" (column 5, lines 49-52) or is "movable for partial/full extraction" (column 5, lines 68-69). There is no discussion of a flex cable, and it is likely that sliding contacts are employed, to insure that the connector remains "affixed to the interior of the housing".

Hence, Applicants respectfully submit that the recitation of Claim 5, "a flex cable interconnecting said data storage device and said external data transfer interface", is patentable over Leonhardt under 35 U.S.C. 102(b), and respectfully request allowance thereof.

35 USC 103:

Claim 6 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Leonhardt et al. in view of Chan (U.S. Patent No. 5,214,550). Claim 43 was also rejected, but has been canceled.

Claim 6:

The Examiner states that although alignment pins are not taught by Leonhardt et al., "such feature is well known in the art as taught by Chan (column 6, lines 11-18). *** It would have been obvious *** to incorporate pins and holes as taught by Chan in the arrangement of Leonhardt et al. to insure data transfer between the cartridge and the transfer station can occur."

Applicants respectfully submit that Chan relates to a cartridge with a partial disk drive, encompassing within the cartridge, a disk, heads, a rotary actuator spindle assembly, etc., without any discussion of a shock mount within the cartridge. Rather, the entire cartridge is arranged to be fixed to and operated by the "drive" on which it is mounted.

Specifically, a "guide strip 80 having the same width as the key slot is disposed on the lower side of the elevator 81 in the drive 11 such that, when engaged by the key slot 79, the strip constrains and positions the cartridge 10 within the elevator." (column 4, lines 45-49).

Hence, Applicants respectfully submit that the arrangement of Claims 1 and 4, with a shock mount and external data transfer interface, from which Claim 6 depends, in combination with the "registration holes at said external data transfer interface for acceptance of alignment pins to register said external data transfer interface with respect to said transfer station" of Claim 6, patentably defines over Leonhardt et al. as discussed above, and patentably defines over Chan under 35 U.S.C. 103(a). Hence, Applicants respectfully request allowance of Claim 6.

Additional Art:

The additional reference cited by the Examiner (Hodge et al., U.S. Patent No. 5,371,644) has been examined and as best understood, does not teach or suggest Applicants' claimed invention.

SUMMARY:

Applicants respectfully submit that rejected Claims 1 and 3-6 are patentable over the cited art, and that allowable Claims 2, 7-12 and 44-46 are rewritten in independent form so as to be allowed, and, as the result, Claims 1-41 and 44-46 are in condition for allowance or allowed.

Respectfully submitted,
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JHH/cw

Attachments: Declaration under Rule 1.132